## MHCC Comparison of Nursing Home Bed Need Methodologies

	Current Methodology	Proposed Methodology
Assumptions:		
Migration from outside Maryland	For migration from adjacent states, it is assumed that current pattern of migration will increase in the future at their projected rate of population growth. Migration from all other states is assumed to remain constant.	Proportion of migration observed in base year from all other states is assumed to remain constant in the future.
Patients unknown origin	N/A	Proportion of patients with unknown origin in base year is assumed to remain constant in the future.
Migration among MD jurisdictions	Addressed	Addressed: new approach
Use Rate by Age	Use rates by age: <65, 65-74, 75-84, 85+	Same use rate age groups
Projection time frame	7 years from the base year	5 years from the base year
Steps:		
Base year use rate	Calculate base year use rates by age groups, jurisdiction of residence	Same process
Target year use rate	Calculate target year use rate by reducing base year use rate by 5%	Calculate target year use rate by age group and jurisdiction of residence by  (a) calculating the statewide use rate for the most recent 6 years by age group;  (b) calculating average annual change in the statewide use rate by age group;  (c) calculating target year use rate by age group and jurisdiction of residence by multiplying base year use rate by age group and jurisdiction of residence by the statewide average annual use rate change by age group, year to year, from base year to target year.
Migration-adjusted target year patient days	(a) When the jurisdiction of residence is the same as the jurisdiction of care, and the <u>retention rate</u> is less than 80 percent, and <u>the base year use rate for the 65+ population</u> is greater than the 33rd percentile, add the base year patient days for a given age group, receiving care in the same jurisdiction of residence, to one half of the base	Migration adjustment from outside Maryland/unknown origin: (a) Calculate base year proportion of total non-Maryland patient days represented by patients from outside of Maryland or with unknown origin by dividing non- Maryland patient days by total Maryland patient days;

- year patient days for a given age group receiving care outside the jurisdiction of residence; divide the result by the base year patient days for the age group and jurisdiction of residence; multiply by the target year patient days for the age group and jurisdiction of residence; and sum the result over all jurisdictions of residence in Maryland;
- (b) When the jurisdiction of residence in Maryland is not the same as the jurisdiction of care, and the retention rate is less than 80 percent, and the base year use rate for the 65+ population is greater than the 33rd percentile, divide the base year patient days for a given age group, a given jurisdiction of residence, and a given jurisdiction of care by twice the base year patient days for the age group and the jurisdiction of residence; multiply the result by the COMAR 10.24.08 25 target year patient days for the age group and jurisdiction of residence; and sum the result over all jurisdictions of residence;
- (c) When the retention rate is greater than 80 percent, or the base year use rate for the 65+ population is less than the 33rd percentile, the target year patient days are equal to the patient days for each jurisdiction of residence as calculated in step (a); sum the result over all jurisdictions of residence;
- (d) When the jurisdiction of residence is an <u>adjacent state</u>, sum the base year patient days for each age group and jurisdiction of residence for a given jurisdiction of care, multiply the base year patient days for each age group by the population growth rate in that age

- (b) Calculate target year non-Maryland patient days for each jurisdiction of care by multiplying the target year patient days by the base year proportion of non- Maryland patient days;
- (c) Calculate total target year patient days for each jurisdiction by adding Maryland and non-Maryland patient days for target year.

	group, and sum the result over all	
	jurisdictions of residence for a	
	given jurisdiction of care.	
Gross bed need	Calculate gross bed need for each	Same process
	jurisdiction of care by dividing the	
	target year patient days for the	
	jurisdiction by the product of 365 and	
	0.95.	
Net bed need	Calculate net bed need for each	Same process
	jurisdiction of care by subtracting the inventory of beds from the gross bed	
	need for the jurisdiction.	
Community-Based	Calculate the number of nursing	There is no community based services
Services Adjustment	home beds for which community-	adjustment since the statewide use
	based services (CBS) will substitute	rate is declining.
	by calculating the proportion of total	J T
	nursing home patient days for those	
	who, on admission, are light care,	
	continent, and not cognitively	
	impaired.	
Net migration	See section of Migration-adjusted	Migration adjustment among MD
adjustments among	target year patient days	jurisdictions:
MD jurisdictions		Calculate average net migration bed need for each jurisdiction of care by
		applying the following rules:
		(a) Calculate the most recent three
		years of in-migration days for each
		years of ill-filligration days for each
		jurisdiction of care by summing
		jurisdiction of care by summing patient days from patients getting care services in the jurisdiction of
		jurisdiction of care by summing patient days from patients getting care services in the jurisdiction of care but originating outside the
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		(e) Calculate the average net migration bed need by dividing the average net migration days by the product of 365 and 0.95.
Occupancy adjusted net bed need	Was addressed through SHP standard.	If a positive bed need is projected, but the average jurisdictional occupancy for the most recent 24-month period is below 90%; the bed need is adjusted to